

PROCEDURE 21

RADIO/COMPUTER COMMUNICATIONS

A. Terminology and Definitions

1. At: Company is in service at a location other than quarters. The company is available for calls via radio channel "Dispatch 1." Dispatch is to be given the following information.
 - a. Exact location
 - b. Estimated time to remain at this location.
 - c. When leaving the location, the company must transmit, "Clear from (location)."
2. Back: Company has returned to quarters and is available for calls via the "Zetron" radio channel.

Note: Do not use this term unless the company is available for calls.

3. Clear: Company is **leaving current location** and is available for calls via radio channel "Dispatch 1."
4. Full Response: Refers primarily to structure fires.
 - a. Three Engine Companies.
 - b. One Truck Company.
 - c. One "RIC" Company.
 - d. One Battalion Chief.
 - e. Shift Duty Officer.
5. In Service: Company is **remaining at current location**. Company is available for calls via radio channel "Dispatch 1."
6. Limited Response:
 - a. Fire Companies on limited response will be dispatched only in the following situations:
 - 1) Heart attack;
 - 2) Unconscious person;

- 3) Difficulty breathing;
 - 4) Major accidents;
 - 5) Second or greater alarms;
 - 6) At the discretion of the dispatcher, considering call activity or excessive response times due to location of the next responding company.
- b. MICUs on limited response will be dispatched only in the following situations:
 - 1) Heart attack;
 - 2) Unconscious person;
 - 3) Major accident;
 - 4) At the discretion of the dispatcher, considering call activity or excessive response times due to location of the next responding company.
7. Mission The purpose for which a company is en route to a given (non-emergency) location. This is necessary for the dispatchers to maintain proper response coverage.
8. Out: Company is on the scene of an emergency and unavailable for assignment to another call.

Note: When checking “out,” the company will give the location to which they are checking out prior to the size-up. This is done to confirm the correct location and aid the dispatchers in keeping track of what companies are where.
9. Out of Service: Company is unavailable for response for reasons other than assignment to an emergency. The reason for being out of service and the estimated time for returning to service must be communicated to Dispatch.
10. Simulcast or Simul-select: Procedure used by Alarm Office personnel to broadcast radio messages over multiple channels or talk groups simultaneously.
11. Status: Availability of a company to respond to calls. There are only three levels of status.
 - a. In Service (Back, Clear, At, In Service)

- b. Out of Service (Out, Out of Service)
- c. Limited Response

Note: All companies are assumed to be in service until Dispatch has been notified otherwise!

- 12. Transmit: Term used to request a first alarm response to a given location. If more than a first alarm response is desired, the company officer should state the request as, “Transmit a second (or third, etc.) alarm to (give the location).”
- 13. Transport Only: A request for additional MICU(s) will also receive the Shift Duty Officer and Battalion Chief unless this term is included in the request.
- 14. Dispatch
 - a. Name given to identify the Irving Fire Department Alarm Office or Alarm Office personnel.
 - b. To notify or send a company or equipment, by radio, of an emergency to which they must respond.
- 15. Radio Identification for Personnel
 - a. Mobile radio for each piece of equipment will be designated by unit name. (ie. “Engine 5”, “Truck 2”, Medic 5”)
 - b. Officer - “Engine 8 Officer to Engine 8”
 - c. FEO
 - 1) Engines - “Engine 2 Driver”
 - 2) Trucks - “Truck 2 Driver”
 - d. Medic Units
 - 1) Medic Driving – “Medic 4 Driver”
 - 2) Medic attending patient – “Medic 4 Attendant”

e. Fire Fighters

- 1) Fire Fighter assigned behind officer – Fire Fighter A (“Engine 1 Fire Fighter A”)
- 2) Fire Fighter assigned behind driver – Fire Fighter B (Engine 1 Fire Fighter B”)

B. Radio Channels

The Irving Fire Department radio system is a part of the City of Irving’s truncated 800 MHz system (EDACS). This system uses “talk groups” to separate communications between and within various departments using the system. For continuity of terminology and keeping with tradition, Fire Department personnel will use the term "Channel" when referencing a talk group. The following is a list and description of the channels used within the Fire Department communications system.

Notes:

- The Control Base Radio unit located in each fire station should **NEVER** have the channel changed.
 - Mobile apparatus radios are programmed to display the name of the radio channel on the LED readout.
 - Portable radios obtain the desired channel by placing the channel selector knob in the numbered position that matches the correct channel number.
1. Fire Alert This channel is used to open the station speakers in order to dispatch companies from quarters and for making general announcements. This channel is not accessible to the portable radios.
 2. Dispatch 1: The first position (1) on the portable radios.

The primary “on air” communications channel. Companies who are “clear”, “in service”, or “at” a location will monitor this channel.
 3. Fireground 2: Second position (2) on portable radios.

The primary channel activated when companies are dispatched to a structure fire.
 4. Fireground 3 and 4: Third and fourth positions on the portable radios.

Alternate channels available for multiple incidents.

5. EMS 5 and 6: Positions 5 and 6 on the portable radios.
 - a. These channels are reserved for incidents involving mass casualties or other major events in which it would be advantageous to place all medical companies on a separate channel.
 - b. When necessary, these channels are also available for other purposes.
 - c. These channels are not monitored by Dispatch and should not be used without authorization from Dispatch.
6. Biotel 7: Position 7 on the portable radios.
 - a. This channel provides direct communication with Biotel Medical Control.
 - b. Dispatch does not monitor this channel. While using this channel, companies should ensure that another radio monitors the operational channel. After using Biotel 7, members must return the radio to their assigned on-air channel.
7. Training 8: Position 8 on the portable radios.
 - a. Channel reserved for use by the Training Activity or companies actively involved in training exercises requiring the use of radio communications.
 - b. Dispatch does not monitor this channel unless requested by the officer conducting the training.
8. Fire Prevention: Position 9 on the portable radios.
 - a. Members of the Fire Prevention Division will use this channel for communications within the Fire Prevention Division.
 - b. Dispatch will not monitor this channel.
 - c. Dispatch and Fire Operations personnel will contact Fire Prevention only on the Fire Prevention Channel.

Exception: When an inspector or investigator is assigned to an incident, that member will be instructed by Dispatch as to which Fireground Channel to use.

9. Fire Administration: Position 10 on the portable radios.

Reserved for special events and use by Fire Administration. Dispatch will not monitor this channel unless requested by a Chief Officer.

10. NPSPAC 1-5: (Pronounced “Nips Pack”) Positions 11-15 on the portable radios.

- a. These channels are primarily used for communications with Care Flight. They are also available for use with other agencies outside of the City of Irving Radio System.
- b. There are strict rules governing the use of these channels. As such, these channels are not to be used unless designated to do so by Dispatch. The dispatcher will advise the Incident Commander or Medical Transport Officer which channel will be used and when to activate the channel.
- c. If portable radios are unable to communicate with Care Flight or another agency, using the more powerful mobile apparatus will improve communications. Position 14 on the portable radio is NPSPAC 4 to Careflight, and is the most reliable.

11. Simplex: (Also known as “Talk Around”) Position 16 on the portable radio.

- a. This channel bypasses the EDACS system and repeaters. Communication on this channel is directly from radio to radio. Dispatch **can not** monitor this channel.
- b. This channel provides a strong, short-ranged signal. This feature is useful for communication within large structures or when below grade.
- c. The decision to use this channel should be made by the first-arriving company or the Incident Commander. When activating this channel, all involved companies should be notified prior to entering a structure.
- d. When the Simplex channel is used, a Fire Department member, with two radios, must remain **outside of the structure**. One radio (preferably the mobile) is used to monitor the Simplex channel and the second radio is used to monitor the operations channel. This is necessary to ensure the safety of personnel inside the structure and maintain communications with Dispatch.

- e. This channel can be used as a backup to the NPSPAC channels when communicating with Care Flight or other agencies. The frequency designation is 866.550 MHz.

C. Availability for Response

1. Before leaving their district, all companies should contact Dispatch to report their mission and destination. The dispatchers will coordinate out-of-district movement to assure adequate response coverage of the city.
2. Out-of-district companies should report upon arrival at their destination and again on departure. Companies leaving the city should report when leaving and again when returning.
3. The first company checking “out” on an emergency scene should restate or confirm the address in their size-up. This will ensure that other responding units have the correct address and will avoid any confusion should multiple companies check out simultaneously.
4. It is departmental policy for the closest company to respond. In district companies will always be dispatched as if closest to any incident occurring in that district. Companies on the air and not on assignment are required to monitor “Dispatch 1.” If an officer believes his/her company is closer, that company will respond. The officer will not delay response and clutter the airwaves asking Dispatch if he/she should respond. Dispatch will intervene if they have specific information that clearly establishes the better response.

D. Communicating on the Radio

1. It is important that all radio communications be as clear and concise as possible. It is also important that a professional attitude be maintained at all times. Besides being monitored by citizens and the media, all radio messages are taped and are subject to being subpoenaed for use in court. A flippant or joking attitude can be very damaging in a court case. The following radio follies should be avoided.
 - a. **RADIO PERSONALITY:** Great for DJs but not for Fire Department communications. All transmissions should be consistent in tone, pace, and content. Do not try to stand out.
 - b. **THE RADIO HIGH FIVE:** Radio high five’s put special emphasis on certain words or draw them out, such as “Truck Niiiiiine, BACK!”
 - c. **THE GOOD BUDDY:** Fire Department communications should bear no resemblance to CB chatter.

- d. **PERSONAL MESSAGES:** Inside jokes, first names, and other personal messages should be avoided. *Example:* “Engine 1, go see Jimmy at the shop.” “Engine 1, call the mechanics” is more professional.
- e. **FOUL LANGUAGE:** Under FCC regulations, foul language on the radio is **against the law**.

Examples of Appropriate Radio Terminology:

- a. **Engine 1 clear Station 1, en route to the Academy for CE.**
 - b. **Engine 1 at the Academy for EMS CE, on limited response.**
 - c. **Engine 1 out of service, en route to Irving Hospital to retrieve personnel.**
2. There are many obstacles to effective radio communications. Background noise, static, other radio traffic and even the sound of a person’s own heartbeat and breathing can become detrimental. We must all make an extra effort to be understood when speaking on the radio. We must be equally clear in our understanding of messages received. The following procedures will be used for radio transmissions
- a. Press the PTT (Push to Talk) button and wait for the mid-toned beep. If you do not receive this tone you have failed to access the EDACS system and you are not transmitting. (see number 3a below)
 - b. When transmitting on the mobile hand held microphone or the portable radio, the speaker’s mouth should be approximately three inches from the microphone. Speak slowly in a normal voice as clearly and succinctly as possible. Avoid “forceful” speech (i.e. yelling, etc.) as this distorts the sound.
 - c. When transmitting on the mobile headset, the microphone should be about one inch directly in front of the speaker’s mouth.
3. The EDACS system will prevent transmissions on the same channel from being “stepped on” with one exception
- a. Any transmission from a dispatcher console will override any other transmission on the same channel. As a result, it is possible for an access confirmation beep to be received and still not have the transmission heard.

- b. To prevent “lost” messages, all transmissions must be acknowledged. The accepted method of acknowledging receipt of a message will be to repeat the essence of the message back to the sender.

4. Courtesy

- a. Do not try to “slip in” a radio transmission on the tail end of another company’s transmission. Unless you are declaring an Emergency Situation, wait until Dispatch or other requested company has completed their message before interjecting yours.
- b. Although appreciated in conversation, please and thank you are not parts of emergency radio communication.
- c. Keep transmissions short and to the point. Know what you intend to say before keying the microphone. Someone else may need the open channel.

5. Request for Additional Equipment

When requesting additional equipment, the request must be for a specific need and include the desired response code. If the requesting members are dispatched to assist a company on scene, the response is Code 3 unless told otherwise. If the officer believes the response should be reduced to Code 1, he should ask the company on scene for clarification, not Dispatch.

- a. If “Manpower” is requested, the closest Fire Company will be sent. A brief description of the reason manpower is being requested will allow the responders to be prepared for the event with the proper Personal Protective Equipment (PPE).
- b. A request for “Extrication” will receive the closest in-service equipment with extrication equipment, a Battalion Chief and the Shift Duty Officer.

A request for a Truck Company **IS NOT** a request for extrication equipment. The nearest Truck Company may not have the desired equipment available. This is true for all requests (smoke ejectors, aerial ladder, forcible entry tools, etc.) Just because a truck or an engine normally carries the equipment desired does not ensure that equipment is available on that apparatus, when requested.

It is important for all Company Officers to notify Dispatch DAILY of all equipment out of service. This will allow the dispatcher to ensure the closest available equipment is dispatched to the emergency when requested.

- c. A request for additional MICU(s) will receive the MICU, the Shift Duty Officer, and a Battalion Chief. If the Shift Duty Officer and Battalion Chief will not be needed, the additional MICU must be requested for “Transport Only.”
- d. A request for a “Haz-Mat” response must include a size-up of the situation – as detailed as possible. Along with suspected or known product identification, include the amount of release and most desirable route to location and staging area.

The standard response for a Haz-Mat incident will include the district engine and Battalion Chief, Truck 8, and Haz-Mat 8. If the assessment of the situation determines that full encapsulating PPE entry will be required, an MICU and the Shift Duty Officer should also be requested.

6. Police Assistance

- a. The Irving Police Department (IPD) has established response codes for different emergencies, as does the Fire Department. When the Fire Department requests IPD “Code 3,” the standard response is one squad car Code 3 with an automatic back-up unit sent Code 1.

Any unspecified request will receive one IPD squad car, Code 1, without a back up.

- b. To ensure the proper response from IPD to the emergency, the following information and procedures must be followed.
 - 1) Transmit the purpose for IPD response. (i.e. traffic control, personnel protection, accident investigation, domestic violence, child welfare, crowd control, mental warrant, etc.)
 - 2) Confirm the exact location where IPD is needed.

Example:

IPD needed for traffic control on a highway. Specify what ramps or lanes should be controlled and where the squad car(s) should go.

- 3) Number of Police Officers needed.

c. Response code to threat situation

In situations where **any** Fire Department member believes that their life or health is threatened to the point where IPD assistance is needed immediately, the following procedure has been established.

- 1) Transmission of the term “**Code Blue**” will generate a Code 3 response from two IPD Officers to the last known location of the member in peril.

If the member has the opportunity, additional information should be given as previously described.

- 2) This type response places the responding IPD officers and the public at risk. As such, the use of this request must be limited to only the most serious situations.

It is not possible to predict every situation that might arise. Good radio communication, like all good communication, requires good judgment, courtesy, and feedback. If in doubt, repeat the message or ask if you were received. If no one acknowledges a message, assume that it was not received.

Remember: Everything you say on the air is recorded and listened to by the media and public.

E. The Mobile Data Computer will be used to make fire apparatus and MICU status changes.

1. Along with using the function keys, the user will also verbalize via the apparatus radio of any company status change. This is so Alarm Office personnel can verify that the intended change matches the Computer Assisted Dispatch (CAD) system, and that a function key was intentionally utilized. Should a key be inadvertently pressed, Alarm Office personnel should be notified so they can correct the status for that apparatus.
2. Function keys will be used to check “En Route,” “On Scene,” “Available,” “Out of Service,” “Delayed Response,” “En Route to Hospital,” “At Hospital,” and “Back.”
3. After the “En Route” key has been initiated on the MDC, the user should simply wait until Alarm Office personnel check units en route before responding verbally on the radio. Any other function key utilized will be immediately followed by verbal radio communication.

- a. **F1—En Route:** This key to be utilized when the apparatus is en route after receiving an alarm. The radio will also be used after prompting by Alarm Office personnel.
 - b. **F2—On Scene:** This key to be utilized when the apparatus is checking on scene. The radio will also be used.
 - c. **F3—Back:** This key to be utilized when the apparatus is back at their assigned quarters. The radio will also be used.
 - d. **F4—Out of Service:** This key to be used when the apparatus is unavailable for an assignment due to mechanical failure, repairs, out of the city, or manpower shortage. The radio will also be used.
 - e. **F5—Delayed Response:** This key to be used when the apparatus is going to have a delayed response due to those conditions that are unavoidable. When this key is initiated a dialog box will appear asking for the reason. **Example: “Blocked by train.”** The radio will also be used.
 - f. **F6—In Command:** This key to be used on those incidents that require Incident Command. The radio will also be used.
 - g. **F7—To Hospital:** This key to be used when the apparatus or MICU checks en route to the hospital. A dialog box will appear asking for mileage, hospital, and priority. All MICU’s will enter the proper information, all other apparatus will cancel out of the dialog box. The radio will also be used.
 - h. **F8—At Hospital:** This key to be used when the apparatus or MICU arrives at the receiving hospital. The radio will also be used.
 - i. **F9—Available:** This key to be used when the apparatus is clear or available for an assignment. The radio will also be used.
 - j. **F10—Available Area:** This key is the same as the F9 key. This key will NOT be used at this time.
4. Users shall log in on the MDC at shift change.
 5. No one shall attempt to make any setting changes to the MDC with the exception of changing the screen for night use or day use.
 6. When it is necessary to change over to a reserve fire apparatus or reserve MICU, the MDC shall also be changed.

7. When a company is placed in service on another company's apparatus, the lid to the MDC shall be closed and all status changes will be verbalized over the apparatus radio. **Example: The crew of Engine 3 occupies Engine 7 and is in service as Engine 3.** This is usually a possibility after a multiple alarm fire.
8. Station Officers are responsible to see that all personnel are trained in the use of the MDC. Extra training manuals are available from Alarm Office personnel.
9. Each Battalion Chief shall see that all fire apparatus and MICU's under their authority are logged into the MDC's at the beginning of each shift.
10. Alarm Office personnel shall report any companies not using the MDC in a proper manner to the respective Battalion Chief by telephone and to the Assistant Chief, Operations by e-mail.